

Vertiv™ Liebert® GXT5 Lithium-Ion 5-10KVA UPS

Guide to Output Power Distribution – North America



A Vertiv Application Brief

Overview

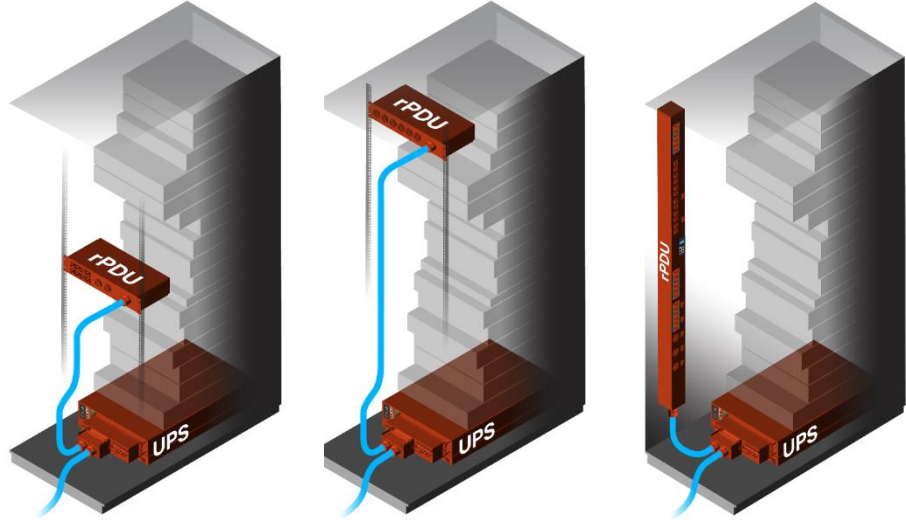
The Liebert® GXT5 Lithium-Ion double conversion online UPS provides the highest level of power conditioning and battery backup in a high power-density rack mounted UPS.

This high-density design allows for more power capacity and runtime in less rack space however it does require that we change how we think about power distribution.

GXT5LI models 6kVA and above are hardwire input and output only.

GXT5 Lithium-Ion models typically use rPDUs to connect loads. This approach saves rack space and reduces excess cabling within the rack.

High Power Density in a Compact Form Factor



rPDUs (Rack Power Distribution Units) are designed to be mounted in the rear of a four-post rack, either horizontally or vertically, behind existing equipment. This allows for flexible power distribution that occupies no additional rack-space. In a two-post rack they would be flush mounted

rPDUs used with GXT5LI 5kVA models can be plugged directly into the UPS. GXT5LI 6-10kVA models are hardwired in and out. The hardwired rPDUs can then be installed into either the same rack as the UPS or an adjacent rack. This minimizes excess cabling while providing great flexibility.

GXT5 Lithium-Ion UPS



MV Models: 208V/120V or 240V/120V 4 Wire Input / Output – L1, L2, N, G

GV Models: 200-240V Global Voltage 3 Wire Input/Output – L1, L2, G or L1, N, G

HV Model: 208V or 240V 3 Wire Input/Output – L1, L2, G

SKU	Power Rating	Input	Output
MV Models 208V/120V, 240V/120V			
GXT5LI-5000MVRT3UXLN	5000VA / 5000W	NEMA L14-30P	(Qty 2) NEMA L14-30P
GXT5LI-6000MVRT3UXLN	6000VA / 6000W	Hardwired	Hardwired
GXT5LI-8000MVRT4UXLN	8000VA / 8000W	Hardwired	Hardwired
GXT5LI-10KMVRT4UXLN	10000VA / 10000W	Hardwired	Hardwired
GV Models 200V-240V			
GXT5LI-6000GVRT3UXLN	6000VA / 6000W	Hardwired	Hardwired
GXT5LI-8000GVRT3UXLN	8000VA / 8000W	Hardwired	Hardwired
GXT5LI-10KGVRT3UXLN	10000VA / 10000W	Hardwired	Hardwired
HV Model 208V or 240V			
GXT5LI-5KL630RT3UXLN	5000VA / 4900W	NEMA L6-30P	(Qty 2) NEMA L6-30P

Output Power Distribution for GXT5LI 5kVA Models

L6-30 or L14-30 Input/Output UPS

GXT5LI-5KL630RT3UXLN

Horizontal rPDUs

Model	Mounting	Type	Input	Output
VP0N3223 (Coming Nov 2024)	2U	Basic	L6-30P	(4) L6-20R, (2) L6-30R
VP9571A	2U	Basic	L6-30P	(12) IEC C13
VP7811B	2U	Monitored	L6-30P	(12) IEC C13, (4) IEC C19
VP53100	2U	Switched	L6-30P	(12) Combo C13/C19

Vertical rPDUs

Model	Mounting	Type	Input	Output
VP8941	0U	Switched	L6-30P	(20) Locking IEC C13, (4) Locking IEC C19
VP8841	0U	Monitored	L6-30P	(36) IEC C13, (6) IEC C19
VP8641	0U	Switched	L6-30P	(20) Locking IEC C13, (4) Locking IEC C19
VP7N3001	0U	Switched	L6-30P	(24) Combo C13/C19
VP7541	0U	Basic	L6-30P	(20) IEC C13, (4) IEC C19
VP5N3000	0U	Switched	L6-30P	(24) Combo C13/C19
VP5870V	0U	Switched	L6-30P	(30) Locking IEC C13, (6) Locking IEC C19
VP43301	0U	Monitored	L6-30P	(36) Combo C13/C19

GXT5LI-5000MVRT3UXLN

Horizontal rPDUs

Model	Mounting	Type	Input	Output
VP0N3202	2U	Basic	L14-30P	(2) L6-30R, (8) 5-15/20R
VP0N3242 (Coming Nov 2024)	2U	Basic	L14-30P	(4) L6-20R, (4) 5-15/30R
VP0N3100	1U	Basic	L14-30P	(12) Combo C13/C19, (4) NEMA 5-20R

Vertical rPDUs

Model	Mounting	Type	Input	Output
I10401	0U	Basic	L14-30P	(20) IEC C13, (4) IEC C19, (12) NEMA 5-20R
I10405	0U	Metered	L14-30P	(20) IEC C13, (4) IEC C19, (12) NEMA 5-20R
NI30512	0U	Monitored	L14-30P	(20) IEC C13, (4) IEC C19, (12) NEMA 5-20R
VP5N3007	0U	Switched	L14-30P	(24) Combo C13/C19, (12) NEMA 5-20R
VP6N3006	0U	Monitored	L14-30P	(24) Combo C13/C19, (12) NEMA 5-20R
CP7N3008	0U	Switched	L14-30P	(24) Combo C13/C19, (12) NEMA 5-20R

All 5kVA GXT5 Lithium-Ion units have a 10' Input Cord

Output Power Distribution for GXT5LI 6-10kVA Models

Hardwire Input/Output UPS

GXT5LI 6-10kVA GV UPS Models

Horizontal rPDUs				
Model	Form Factor	Type	Input	Output
VP0N6263 (Coming Nov 2024)	2U	Basic	Hardwired (L1, L2, G)	(6) L6-30R
VP0N6242 (Coming Sept 2024)	2U	Basic	Hardwired (L1, L2, G)	(4) L6-20R, (2) L6-30R
VP0G7200 (Coming Nov2024)	2U	Basic	Hardwired (L1, L2, G)	(8) U-Lock C19
Vertical rPDUs				
Model	Form Factor	Type	Input	Output
VP4N6013 (Coming Nov 2024)	0U	Monitored	Hardwired (L1, L2, G)	(3) L6-30, (36) Combo C13/C19

GXT5LI 6-10kVA MV UPS Models

Horizontal rPDUs				
Model	Form Factor	Type	Input	Output
VP0N6200	2U	Basic	Hardwired (L1, L2, N, G)	(6) L14-30R
VP0N6202	2U	Basic	Hardwired (L1, L2, N, G)	(4) L14-30R, (2) L6-30R
VP0N6222 (Coming Nov 2024)	2U	Basic	Hardwired (L1, L2, N, G)	(2) L6-20R, (2) L6-30R, (4) 5-15/20R
VP0N6281 (Coming Nov 2024)	2U	Basic	Hardwired	(2) L6-30R, (8) 5-15/20R
Vertical rPDUs				
Model	Form Factor	Type	Input	Output
VP4N6003	0U	Monitored	Hardwired (L1, L2, N, G)	(18) C13/C19 Combo Outlets, (12) NEMA 5-20R, (3) NEMA L14-30R



UPS Wiring Requirements

MV Models

Model	Recommended Panel Feeder Breaker	Recommended Wire Size	Maximum Wire Size	Input Breaker	Output Breaker	Bypass Breaker
GXT5LI-5000MVRT3UXLN	30A	N/A	N/A	30A	30A	30A
GXT5LI6000MVRT3UXLN	40A	8 AWG	4 AWG	40A	40A	40A
GXT5LI8000MVRT4UXLN	70A	4 AWG	4 AWG	60A	60A	60A
GXT5LI10KMVRT4UXLN	70A	4 AWG	4 AWG	60A	60A	60A

HV/GV Models

Model	Recommended Panel Feeder Breaker	Recommended Wire Size	Maximum Wire Size	Input Breaker	Output Breaker	Bypass Breaker
GXT5LI-5KL630RT3UXLN	30A	N/A	N/A	30A	30A	30A
GXT5LI-6000GVRT3UXLN	50A	8 AWG	4 AWG	50A	50A	50A
GXT5LI-8000GVRT3UXLN	60A	6 AWG	4 AWG	60A	60A	60A
GXT5-10KGVRT3UXLN	70A	4 AWG	4 AWG	70A	70A	70A

For more detailed information please refer to the Installer User Guide for your specific model UPS. These documents and more can be found at [Vertiv.com](https://www.vertiv.com)



rPDU Basic Specifications

Horizontal Models				
Model	Input	Cord Length	Output Breakers	Physical
VP0N3223	L6-30P	10'	(1) 20A Double Pole Magnetic (1) 30A Double Pole Magnetic	2U - 3.4in x 17in x 8in
VP9571A	L6-30P	10'	(2) 20A Double Pole Magnetic	1U - 1.72in x 17in x 6.50in
VP7811B	L6-30P	10'	(2) 20A Double Pole Magnetic	2U - 3.4in x 17in x 9in
VP53100	L6-30P	10'	(2) 20A Double Pole Magnetic	1U - 1.72in x 17in x 12in
VP0N3202	L14-30P	10'	(2) 20A Single Pole Magnetic	2U - 3.4in x 17in x 8in
VP0N3242	L14-30P	10'	(2) 20A Single Pole Magnetic (4) Double Pole Magnetic	2U - 3.4in x 17in x 8in
MN00X1R1-16MCQ9-3TL14A0A10-S	L14-30P	10'	(2) 20A Double Pole Magnetic	1U - 1.72in x 17in x 12in
VP0N6263	Hardwired (L1, L2, G)	N/A	(6) 30A Double Pole Magnetic	2U - 3.4in x 17in x 8in
VP0N6242	Hardwired (L1, L2, G)	N/A	(4) 16A Double Pole Magnetic	2U - 3.4in x 17in x 8in
VP0G7200	Hardwired (L1, L2, G)	N/A	(4) 16A Double Pole Magnetic	2U - 3.4in x 17in x 8in
VP0N6200	Hardwired (L1, L2, N, G)	N/A	(6) 30A Double Pole Magnetic	2U - 3.4in x 17in x 8in
VP0N6202	Hardwired (L1, L2, N, G)	N/A	(6) 30A Double Pole Magnetic	2U - 3.4in x 17in x 8in
VP0N6222	Hardwired (L1, L2, N, G)	N/A	(4) 20A Double Pole Magnetic (2) 30A Double Pole Magnetic	2U - 3.4in x 17in x 8in
Vertical Models				
Model	Input	Cord Length	Output Breakers	Physical
VP8941	L6-30P	10'	(2) 20A Double Pole Magnetic	66.25in x 2in x 2.6in
VP8841	L6-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2in
VP8641	L6-30P	10'	(2) 20A Double Pole Magnetic	66.25in x 2in x 2.6in
VP7N3001	L6-30P	10'	(2) 20A Double Pole Magnetic	66.25in x 2in x 2.6in
VP7541	L6-30P	10'	(2) 20A Double Pole Magnetic	66.25in x 2in x 2.6in
VP5N3000	L6-30P	10'	(2) 20A Double Pole Magnetic	66.25in x 2in x 2.6in
VP5870V	L6-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
VP43301	L6-30P	10'	(2) 20A Double Pole Magnetic	66.25in x 2in x 2.6in
I10401	L14-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
I10405	L14-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
NI30512	L14-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
VP5N3007	L14-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
VP6N3006	L14-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
VP7N3008	L14-30P	10'	(2) 20A Double Pole Magnetic	70in x 2in x 2.6in
VP4N6013	Hardwired (L1, L2, G)	N/A	(4) 16A Single Pole Magnetic (3) 30A Double Pole Magnetic	72in x 2in x 2.6in
VP4N6003	Hardwired (L1, L2, N, G)	N/A	(2) 20A Double Pole Magnetic (3) 30A Double Pole Magnetic	66.25in x 2in x 2.6in

GXT5 Lithium-Ion Rear Panel

GXT5 Lithium-Ion 6-10kVA

All GXT5LI 6-10kVA models are hardwire input and hardwire output. They require an electrician for installation.

GXT5LI 6-10kVA UPS



Hardwire Input from Utility

Hardwire Output to rPDU



VP0N6202 rPDU

GXT5 Lithium-Ion 5kVA

GXT5LI-5KL630RT3UXLN: L6-30P Input, (2) L6-30R Output

GXT5LI-5000MVRT3UXLN: L14-30P Input, (2) L14-30R Output

GXT5LI 5kVA UPS



2 Always-On Outlets On short dongles

Input Cord

30A Plug Output to rPDU



VP0N3202 rPDU

VP4N6003 Vertical rPDU

Combo C13/C19 Outlets

NEMA 5-15R Outlets

Monitoring Card

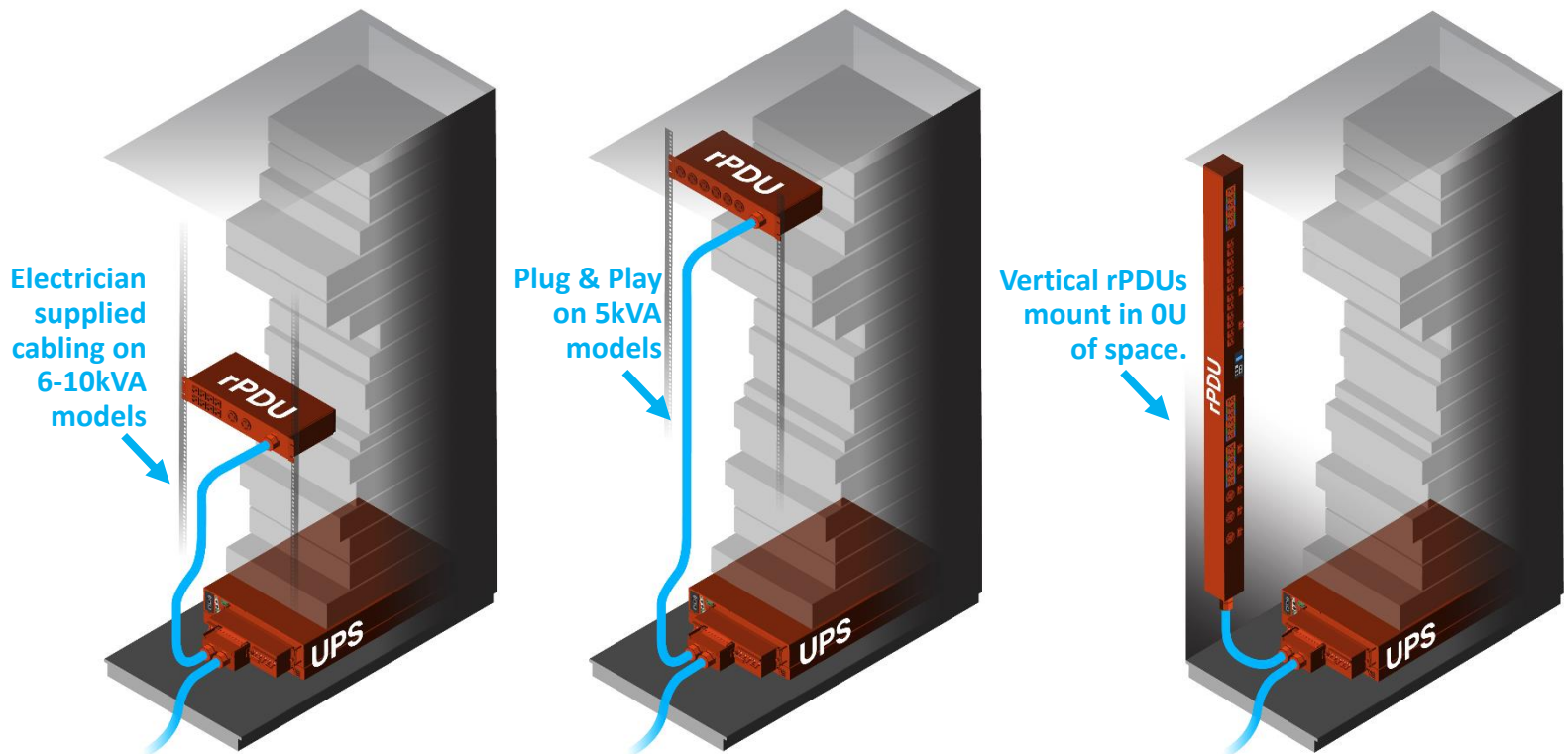
Combo C13/C19 Outlets

NEMA Locking Outlets (For Adjacent Rack)

Hardwired Input



Flexible Mounting Options



Vertiv rPDU Extenders offer flexible mounting options for both 2 and 4 post racks.

Horizontal models can easily be mounted behind existing equipment in the same U space.

For additional rPDU mounting options, refer to the [Vertiv Geist Rack PDU Accessory Brochure](#)

